

WHAT IS CLAIMED IS:

1. A hybrid type telephony system capable of establishing a connection between conventional type telephone sets contained in an exchange unit and LAN type telephone sets contained in an IP network, the system comprising:

a gateway circuit connected between the exchange unit and the IP network and performing voice data format conversion, and

a central control unit connected to the LAN of the IP network for establishing a communication path to the exchange unit via a control bus, controlling switching of IP packets of the IP network, managing IP address information of the LAN type telephone sets and the gateway circuit via the LAN, and controlling connection between the LAN type telephone sets and connection between the LAN type telephone sets and the gateway circuit.

2. A hybrid type telephony system capable of establishing a connection between conventional type telephone sets contained in a private branch exchange unit and LAN type telephone sets contained in an IP network, the system comprising:

a gateway circuit connected between the private branch exchange unit and the IP switch and performing voice data format conversion, and

a central control unit connected to the LAN of the  
10 IP switch for establishing a communication path to the  
private branch exchange unit via a control bus,  
controlling switching of IP packets of the IP network,  
managing IP address information of the LAN type telephone  
sets and the gateway circuit via the LAN, and controlling  
15 connection between the LAN type telephone sets and  
connection between the LAN type telephone sets and the  
gateway circuit.

3. The hybrid telephony system as claimed in Claim  
1, wherein the LAN type telephone sets have IP address  
information of the central control unit, upon call to one  
of the LAN type telephone sets, transmits a call  
5 requesting packet to the central control unit via the LAN  
according to the IP address information, inquires the  
central control unit about a destination IP address, and  
fetches the destination IP address to establish  
communication.

4. The hybrid telephony system as claimed in Claim  
2, wherein the LAN type telephone sets have IP address  
information of the central control unit, upon call to one  
of the LAN type telephone sets, transmits a call  
5 requesting packet to the central control unit via the LAN  
according to the IP address information, inquires the  
central control unit about a destination IP address, and  
fetches the destination IP address to establish  
communication.

5. The hybrid telephony system as claimed in Claim 3, wherein upon connection between one of the LAN type telephone sets and one of the conventional type telephone sets, the central control unit reports the IP address of the gateway circuit to the LAN type telephone set and the IP address of the LAN type telephone to the gateway circuit, so as to establish a communication path between the conventional telephone set and the gateway circuit.

6. The hybrid telephony system as claimed in Claim 4, wherein upon connection between one of the LAN type telephone sets and one of the conventional type telephone sets, the central control unit reports the IP address of the gateway circuit to the LAN type telephone set and the IP address of the LAN type telephone to the gateway circuit, so as to establish a communication path between the conventional telephone set and the gateway circuit.

7. The hybrid telephony system as claimed in Claim 1, wherein the central control unit assigns a single extension representation telephone number for the plurality of conventional type telephone sets and the plurality of LAN type telephone sets as a single group and, upon call from one of the conventional telephone sets or the LAN type telephone sets using the extension representation telephone number, performs a call-incoming processing to all the telephone sets in the group.

8. The hybrid telephony system as claimed in Claim 2, wherein the central control unit assigns a single

extension representation telephone number for the plurality of conventional type telephone sets and the plurality of LAN type telephone sets as a single group and, upon call from one of the conventional telephone sets or the LAN type telephone sets using the extension representation telephone number, performs a call-incoming processing to all the telephone sets in the group.

9. The hybrid telephony system as claimed in Claim 3, wherein the central control unit assigns a single extension representation telephone number for the plurality of conventional type telephone sets and the plurality of LAN type telephone sets as a single group and, upon call from one of the conventional telephone sets or the LAN type telephone sets using the extension representation telephone number, performs a call-incoming processing to all the telephone sets in the group.

10. The hybrid telephony system as claimed in Claim 4, wherein the central control unit assigns a single extension representation telephone number for the plurality of conventional type telephone sets and the plurality of LAN type telephone sets as a single group and, upon call from one of the conventional telephone sets or the LAN type telephone sets using the extension representation telephone number, performs a call-incoming processing to all the telephone sets in the group.

11. The hybrid telephony system as claimed in Claim 5, wherein the central control unit assigns a single

extension representation telephone number for the plurality of conventional type telephone sets and the plurality of LAN type telephone sets as a single group and, upon call from one of the conventional telephone sets or the LAN type telephone sets using the extension representation telephone number, performs a call-incoming processing to all the telephone sets in the group.

12. The hybrid telephony system as claimed in Claim 6, wherein the central control unit assigns a single extension representation telephone number for the plurality of conventional type telephone sets and the plurality of LAN type telephone sets as a single group and, upon call from one of the conventional telephone sets or the LAN type telephone sets using the extension representation telephone number, performs a call-incoming processing to all the telephone sets in the group.

13. The hybrid telephony system as claimed in Claim 1, wherein the central control unit integrates the call control, service control, maintenance/operation service.